

## Patent Abstracts of Japan

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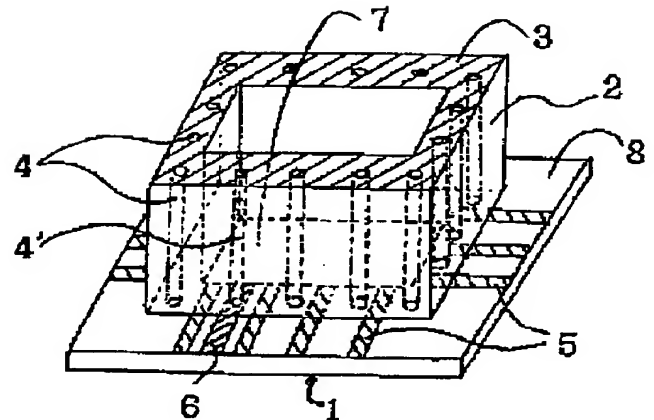
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APPLICANT : NGK SPARK PLUG CO LTD;

INVENTOR : WASHINO JUNICHI;

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TITLE : ELECTRONIC COMPONENTS  
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**ABSTRACT :** PROBLEM TO BE SOLVED: To prevent the noise generation or malfunction due to electromagnetic waves by forming and grounding a metallized layer or vias on a frame which surrounds and bonds electronic components on a ceramic substrate to improve the shield effect.

**SOLUTION:** The package includes electronic components mounted on a substrate 1 surrounded by a frame 2 the top surface of which is covered with a metallized layer 3 and vias 4 vertically piercing the frame 2 are connected to this layer 3. On the surface of the structure 1, a signal wiring 5 is formed which extended from the inner surface 7 of the substrate 1 to the substrate's peripheral surface 8 through a joint face with the frame 2 and runs between the vias 4, with keeping the insulation from the vias 4 at the joint face. At least, one 4' of these vias 4 is electrically connected to a grounding wiring 6 on the substrate 1 and joint face with the frame 2. Thus the metallized layer 3 and vias 4 are grounded through the via 4' to shut off electromagnetic waves from frame side faces.

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